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EXAMINER

PAYNE, SHARON E

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 03/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/002,076

Applicant(s)

BISCHEL ET AL.

Examiner

Sharon E. Payne

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>0703</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 17 February 2004 has been entered.

***Information Disclosure Statement***

2. The information disclosure statement filed July 3, 2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. (The foreign references and the foreign search report are not in the file, and they have not been considered.)

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by McDonald (U.S. Patent 2,809,074).

Regarding claim 1, McDonald discloses a structural beam. The device includes a main beam (Fig. 1), at least a first standoff connected to and projecting from the main beam (Fig. 1, reference number 23b), and a first electrifiable cable anchored to the main beam near the ends of the main beam and extending over the standoff (Fig. 4, reference number 26), the cable substantially spanning the length of and providing support to the main beam (Fig. 1).

Concerning claim 2, McDonald discloses the cable being anchored at the ends of the main beam (Fig. 2).

Regarding claim 12, McDonald discloses that the cable is tensioned (column 2, lines 39-48).

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald in view of Perrin (GB 2,174,430A).

Regarding claim 3, McDonald does not disclose a main beam with a "T" profile. Perrin discloses a main beam with a "T" profile (Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the beam of Perrin in the apparatus of McDonald to provide a stronger beam.

8. Claims 4, 5, 7, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald in view of Maurer (U.S. Patent 5,025,357).

Regarding claim 4, McDonald does not disclose a lamp attached to the cable. Maurer discloses a lamp (reference number 18) attached to the cable (lead in wire, reference number 2).

It would have been obvious to one of ordinary skill in the art to use the cables of Maurer in the apparatus of McDonald to hang a lamp from the suspended ceiling element.

Concerning claim 5, McDonald does not disclose a low voltage light fixture. Maurer discloses the lamp (reference number 18) comprising a low voltage light fixture (abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the low voltage light fixture of Maurer in the apparatus of McDonald to provide light with low voltages.

Regarding claim 7, McDonald does not disclose a lamp attached to the first and second cable. Maurer discloses a lamp (reference number 18) attached to the first cable (reference number 2) and the second cable (reference number 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the first and second cable of Maurer in the apparatus of McDonald to provide electricity to the lamp.

Concerning claim 8, McDonald discloses a second standoff (Fig. 1) connected to and projecting from the main beam (Fig. 1). McDonald does not disclose a second cable or the lamp.

Maurer discloses a second electrifiable cable (reference number 4) that is substantially parallel to the first cable (reference number 2) and electrically isolated from the first cable (column 1, lines 66-68). Maurer also discloses a lamp (reference number 18) attached to the first and second substantially parallel cables (Fig. 5).

Attaching the second electrifiable cable to the first and second standoffs is considered to be an obvious variation in design. In McDonald, one cable is already

connected to a standoff. It would have been obvious to one of ordinary skill in the art to attach the second cable in the McDonald reference for providing additional support.

It would have been obvious to one of ordinary skill in the art to use the cables of Maurer in the McDonald apparatus for providing electricity to the lamp.

Regarding claim 9, McDonald does not disclose a power supply. Maurer discloses a power supply (reference number 10) electrically coupled to the cable (Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the power supply of Maurer in the apparatus of McDonald to provide power.

9. Claims 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald.

Regarding claim 6, McDonald discloses a second standoff connected to and projecting from the main beam (Fig. 1). McDonald does not disclose a second cable anchored near the ends of the main beam and extending over the second standoff, the second cable being substantially parallel to the first cable and substantially spanning the length of and providing support to the main beam.

Providing a second cable as described in the claim is considered to be an obvious duplication of parts. It would have been obvious to one of ordinary skill in the art to provide a second cable in the McDonald reference like the first cable for providing additional support to the main beam.

Concerning claim 11, McDonald does not specifically disclose a 12-foot main beam. Making the main beam 12 feet long is considered to be an obvious variation in design. It would have been obvious to one of ordinary skill in the art to decide the length of the main beam in the McDonald reference to satisfy building requirements.

10. Claim 10 rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald and Maurer as applied to claim 9 above, and further in view of Guth, Jr. (U.S. Patent 3,683,173).

Regarding claim 10, McDonald does not disclose a transformer. Guth, Jr. discloses a transformer electrically connected to the electrified cable (column 2, lines 36-42).

It would have been obvious to one of ordinary skill in the art to use a transformer in the McDonald reference to vary the voltage in the circuit.

11. Claims 13, 14 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald in view of Claussen et al. (U.S. Patent 4,109,305).

Regarding claim 13, McDonald does not disclose the main beam supporting a plurality of ceiling panels. Claussen et al. discloses the main beam (suspension system, reference number 2) further supporting a plurality of ceiling panels (reference number 6).

It would have been obvious to one of ordinary skill in the art to add the ceiling panels of Claussen et al. to the structure of McDonald for forming a ceiling in a room.



Concerning claim 14, McDonald discloses a truss assembly having a main beam (Fig. 1), at least one standoff support connected to and projecting from the main beam (Fig. 1), and an electrifiable cable (reference number 26) in communication with the standoff and substantially spanning the length of the main beam (Fig. 1). McDonald does not disclose a plurality of truss assemblies as described above, the cross beams or the ceiling panel.

Claussen discloses a plurality of cross beams (reference number 4) running substantially perpendicular to and in communication with the main beam to form a grid (Fig. 1) and a ceiling panel supported by the grid (reference number 6).

Providing a plurality of truss assemblies is considered to be an obvious duplication of parts. It would have been obvious to one of ordinary skill in the art to provide a plurality of the truss assemblies disclosed in the McDonald reference to support a ceiling.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the cross beams of Claussen in the apparatus of McDonald to provide additional support.

Concerning claim 16, McDonald does not disclose a lamp attached to the cable. Claussen et al. discloses a lamp (reference number 24) attached to the cable (Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lamp of Claussen in the apparatus of McDonald to provide light.

Regarding claim 17, McDonald discloses a truss assembly having a main beam (Fig. 1), at least one standoff support connected to and projecting from the main beam (Fig. 1), and an electrifiable cable (reference number 26) in communication with the standoff and substantially spanning the length of the main beam (Fig. 1). McDonald does not disclose a plurality of truss assemblies as described above or the plank elements.

Claussen et al. discloses a plurality of plank elements (reference numbers 4 and 8) spanning between the main beams (reference number 2).

Providing a plurality of truss assemblies is considered to be an obvious duplication of parts. It would have been obvious to one of ordinary skill in the art to provide a plurality of the truss assemblies disclosed in the McDonald reference to support a ceiling.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the plank elements of Claussen et al. in the apparatus of McDonald to provide additional support.

Regarding claim 18, McDonald does not disclose the plank elements being made of metal. Using metal as a ceiling support is well known in the art. It would have been obvious to one of ordinary skill in the art to use metal for the planks in the McDonald reference.

Concerning claim 19, McDonald does not disclose a lamp attached to the cable. Claussen et al. discloses a lamp (reference number 24) attached to the cable (Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lamp of Claussen et al. in the apparatus of McDonald to provide light.

12. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald and Claussen et al. as applied to claim 14 above, and further in view of Halchuck (U.S. Patent 6,079,177).

Regarding claim 15, McDonald does not disclose the composition of the ceiling panel. Halchuck discloses a ceiling panel comprising fiberglass (column 2, lines 57-61).

It would have been obvious to one of ordinary skill in the art to use the fiberglass of Halchuck in the apparatus of McDonald to form the ceiling panels.

### ***Response to Arguments***

13. The arguments filed 17 February 2004 have been considered but are rendered moot in view of new grounds of rejection.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ratliff (U.S. Publication 2002/0194808) discloses a lightweight high load capacity reinforced beam.


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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharon E. Payne whose telephone number is (571) 272-2379. The examiner can normally be reached on regular business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sep

  
Stephen Husar  
Primary Examiner